

REMARKS

After entry of this amendment, claims 1-4, 6, 7, 9-17, and 19-28 are pending. Claims 5, 8 and 18 are cancelled without prejudice or disclaimer. The claims have been amended without prejudice or disclaimer. Support for the amendments is found *inter alia* in the original claims. Further support for amended claim 1 is found in original claims 1 and 7, and in the specification at page 2, lines 30-35, page 3, lines 11-14, and page 5, lines 1-27. Amendments to claims 11 and 17 find further support in the specification at page 2, lines 30-35, and page 3, lines 11-14. Amendments to claim 22 finds further support in original claims 7, 8, 11, 17, and 22. New claims 26, 27, and 28 find support in former claims 1, 11, and 17 respectively. No new matter has been added.

The specification has been amended adding the heading and associated paragraph referencing the related applications already of record. No new matter has been added.

Rejections under 35 U.S.C. § 112, second paragraph

Claims 1, 11 and 17 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness for reciting the phrase “at least one additive in an effective amount.” In response, the claims have been amended without prejudice and disclaimer and do not recite “at least one additive in an effective amount.” In view of the present claim amendments, the rejection is believed to be rendered moot.

Rejections under 35 U.S.C. § 103

Itoh

Claims 1-4, 6, 8, 20, and 22-24 are rejected as being obvious under 35 U.S.C. § 103(a) over Itoh et al. (U.S. Patent No. 5,080,917, hereinafter “Itoh”).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. See MPEP § 2143.03.

The Examiner characterizes Itoh as disclosing a method of making coated granules for animal feed which allegedly meets the limitations of claims 1, 22, and 24. Applicants respectfully disagree. Itoh does not teach or suggest that an organic-polymer coating would improve the pelleting stability of an enzyme-containing granulate compared to an uncoated granulate as required by the claims. Itoh does not mention pelleting nor pelleting stability. Furthermore, the Examiner has acknowledged that Itoh does not teach a pellet comprising a polymer-coated enzyme-containing granule, does not exemplify an enzyme-containing granulate that is suitable for animal feed, nor that the organic polymer-coated enzyme-containing granulate has a pelleting stability greater than uncoated enzyme-containing granulate (see Official Action, page 5). The coating of the Itoh granules serves to protect the granules from acidic degradation in the stomach of the animal, which is different than providing pelleting stability as required by the claims. As found by the court in *In re Antonie*, which reversed the Board's finding of obviousness, it is the invention as a whole, and not some part of it, which must be obvious under 35 U.S.C.S. § 103. *In re Antonie*, 559 F.2d 618, 619-620 (CCPA 1977); see also MPEP § 2141.02 V. Furthermore, the court in *In re Antonie* found that the prior art did not reveal the property which appellant discovered and, therefore, there was no basis to find obviousness. *Id.* Similarly here, Itoh does not disclose or suggest improved pelleting stability of an organic-polymer coated enzyme-containing granule as also acknowledged by the Examiner.

The Examiner further argues that there is no requirement that a person of skill in the art recognize the improved pelleting stability imparted by the coating and that the stability property flows from the process. Applicants respectfully disagree. In *In re Rijckaeert*, the Federal Circuit held that the mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency, that that which may be inherent is not necessarily known, and that obviousness cannot be predicated on what is unknown, even if the inherency of a certain feature is later established. *In re Rijckaeert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993); see also MPEP § 2141.02 V. Similarly here, Itoh does not teach, suggest, or reveal improved pelleting stability of an organic-polymer coated enzyme-containing granule.

Analogous to the holdings in *In re Antonie* and *In re Rijckaeert*, Applicants submit that Itoh does not render the claims obvious because Itoh does not teach, suggest or disclose

improved pelleting stability of an organic-polymer coated enzyme-containing granule as required by the claims.

Nevertheless, in order to expedite prosecution, the claims have been amended without disclaimer or prejudice. The subject matter relating to the organic polymer of claim 7 has been incorporated into independent claims 1 and 22, without disclaimer or prejudice. Itoh does not disclose the polymer limitations of claim 7 as acknowledged by the Examiner, since claim 7 was not included in the rejection. Thus Itoh does not disclose or teach all the limitations of the present claims, for this additional reason. Therefore, Itoh does not render obvious the subject matter of claims 1-4, 6, 8, 20, and 22-24.

Furthermore, if an independent claim is nonobvious then any claim dependent therefrom is nonobvious. *See In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988). Because claims 2-4, 6, 8, 20 and 23-24 are dependent on either independent claims 1 or 22, either directly or indirectly, and because claims 1 and 22 are nonobvious in light of the amendments and the above remarks, claims 2-4, 6, 8, 20 and 23-24 are thus likewise nonobvious.

Application No. 10/125,272

Claims 1-4, 6-17 and 19-23 stand provisionally rejected as being obvious under 35 U.S.C. § 103(a) over co-pending U.S. Application Serial No. 10/125,272 (the '272 application). Applicants respectfully traverse.

The '272 application issued March 7, 2007, as U.S. Patent 7,186,533, and as such this would no longer be a "provisional" rejection. Because the '272 application has a filing date and publication date after the filing date of the present application, the '272 application is not prior art under 35 U.S.C. 102(a), (b), or (e). The earliest filing date of the '272 application is November 8, 2000, which is prior to the November 29, 2000 effective date of revised 35 U.S.C. § 102(e). Therefore the former version of 35 U.S.C. § 102(e) is applicable.

35 U.S.C. § 102 provides in part (with the applicable former version of § 102(e))

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The '272 application published on March 20, 2003 as US 2003/0054511 and is a continuation of Application No. 09/647,757 which was filed on November 8, 2000. In contrast, the present application was filed on December 19, 2001 as a national stage application under 35 U.S.C. § 371 of international application PCT/EP00/05793 filed on June 23, 2000. Because the earliest filing date and publication date of the '272 application are after the filing date of the present application, the '272 application is not prior art under any of 35 U.S.C. §§ 102(a), 102(b), or 102(e).

Because the '272 application is inapplicable as prior art, this rejection is believed to be rendered moot. Reconsideration and withdrawal of this rejection is respectfully requested.

Application No. 10/280,324 in view of Itoh

Claims 1-4, 6-17 and 19-23 stand provisionally rejected as being obvious under 35 U.S.C. § 103(a) over co-pending U.S. Application Serial No. 10/280,324 (the '324 application) in view of Itoh. Applicants respectfully disagree.

The Examiner has previously acknowledged that the '324 application does not disclose polymer-coated granules and relies on Itoh for this teaching. As explained above and in light of the present amendments, neither the '324 application nor Itoh, alone or in combination, teach or suggest all the limitations of the present claims. Itoh does not disclose the polymer coating of the present claims. Because all the claim limitations are not taught or suggested by the

references cited by the Examiner, the '324 application or Itoh, alone or in combination, do not render obvious the subject matter of claims 1-4, 6-17 and 19-23. Reconsideration and withdrawal of this rejection is respectfully requested.

Itoh in further view of Johnson and Jacobsen

Claims 1-4, 6, 8-17, and 19-25 are rejected as being obvious under 35 U.S.C. § 103(a) over Itoh in further view of Johnson et al. (U.S. Patent No. 4,976,977, hereinafter "Johnson") and Jacobsen (US 5,391,371). Applicants respectfully disagree and traverse the rejection.

Itoh is relied on for teaching a polymer-coated granule. As explained above, Itoh does not disclose the polymer coating of the present claims. Neither Johnson nor Jacobsen, alone or in combination, remedy the deficiencies of Itoh. Johnson does not teach or suggest a pellet comprising a polymer-coated enzyme-containing granule. The coating applied to the T granulate as described in Jacobsen requires a high content of an inorganic filler (see Jacobsen column 3 lines 12-22). Furthermore, Jacobsen requires a very specialized support material and complex multistage coating of the specialized support. Thus the method disclosed in Jacobsen is totally different than the method of the claims as amended.

Nevertheless, in order to expedite prosecution, the claims have been amended without disclaimer or prejudice. The subject matter relating to the organic polymer of claim 7 has been incorporated into the claims, without disclaimer or prejudice. Neither Itoh, Johnson, nor Jacobsen, alone or in combination, disclose the organic polymer as recited in the present claims. Thus, Itoh, Johnson, and Jacobsen, alone or in combination, do not disclose or teach all the limitations of the present claims. Therefore, Itoh, Johnson, and Jacobsen, alone or in combination, do not render obvious the subject matter of claims 1-4, 6, 8-17, and 19-25.

Reconsideration and withdrawal of this rejection is respectfully requested.

Double Patenting

Claims 1-4, 7, 10-16, 19, 20, 22 and 23 are provisionally rejected under the judicially created doctrine of obviousness-type double-patenting over claims 1, 3-8 and 14-19 of co-

pending U.S. Application Serial No. 10/125,272. In view of the amendments, Applicants submit that the present claims are not obvious over the '272 application. However, as previously mentioned, an appropriate terminal disclaimer will be filed if the rejection stands when the claims are otherwise found allowable.

Claims 1-4, 11-17, 22, 24 and 25 are provisionally rejected under the judicially created doctrine of obviousness-type double-patenting over claims 1-6, 8, 9, 11-21, 26-28, 31, 32, 34, 36, 37, 39-41, 43, and 45-50 of co-pending U.S. Application Serial No. 10/280,324 in view of Itoh. Applicants respectfully disagree. As explained above, the '324 application does not teach coating the enzyme-containing granulate with an organic polymer, as acknowledged by the Examiner. The Examiner relies on Itoh for teaching a coating which protects the enzyme. The Examiner also acknowledges that Itoh does not explicitly recognize the improved pelleting stability of the organic polymer-coated granules. Nevertheless, in order to expedite prosecution, the claims have been amended without disclaimer or prejudice. The subject matter relating to the organic polymer of claim 7 has been incorporated into the claims, without disclaimer or prejudice. Neither Itoh nor the '324 application disclose the organic polymer as recited in the present claims. Thus, Itoh and the '324 application, alone or in combination, do not disclose or teach all the limitations of the present claims, for this additional reason. Therefore, Itoh and the '324 application do not render obvious the subject matter of claims 1-4, 11-17, 22, 24 and 25.

Claims 1-4, 22 and 23 stand provisionally rejected under the judicially created doctrine of obviousness-type double-patenting over claims 1-3, 5, 8, 12, 13, and 16 of co-pending U.S. Application Serial No. 10/500,144 (the '144 application) in view of Itoh. Applicants respectfully disagree. Neither Itoh nor the '144 application teach an organic polymer-coated enzyme-containing granulate that has a pelleting stability greater than an uncoated granulate as acknowledged Examiner. Nevertheless, in order to expedite prosecution, the claims have been amended without disclaimer or prejudice. The subject matter relating to the organic polymer of claim 7 has been incorporated into the claims 1 and 22, without disclaimer or prejudice. Neither Itoh nor the '144 application disclose the organic polymer as recited in the present claims. Thus, Itoh and the '144 application, alone or in combination, do not disclose or teach all the limitations

of the present claims, for this additional reason. Therefore, Itoh and the '144 application do not render obvious the subject matter of claims 1 and 22 nor the claims dependent therefrom.

Claims 1-4, 8-17 and 19 stand rejected under the judicially created doctrine of obviousness-type double-patenting over claims 1, 2 and 4 of U.S. Patent No. 6,500,426 (hereinafter "the '426 patent") in view of Itoh. Applicants respectfully disagree. The Examiner has previously acknowledged that the '426 patent does not disclose polymer-coated granules and relies on Itoh for this teaching. As explained above, Itoh does not teach or suggest the organic polymer coating as recited in the present claims. The '426 patent does not remedy the deficiencies of Itoh. Nevertheless, in order to expedite prosecution, the claims have been amended without disclaimer or prejudice. The subject matter relating to the organic polymer of claim 7 has been incorporated into the claims, without disclaimer or prejudice. Neither Itoh nor the '426 patent disclose the organic polymer as recited in the present claims. Thus, Itoh and the '426 patent, alone or in combination, do not disclose or teach all the limitations of the present claims, for this additional reason. Therefore, Itoh and the '426 patent do not render obvious the subject matter of claims 1-4, 8-17 and 19.

Reconsideration and withdrawal of this rejection is respectfully requested.

CONCLUSION

For at least the above reasons, Applicants respectfully request withdrawal of the rejections and allowance of the claims.

Accompanying this response is a petition for a two-month extension of time to and including June 26, 2007 to respond to the Office Action mailed January 26, 2007 with the required fee authorization. No further fee is believed due.

However, if an additional fee is due, the Director is authorized to charge our Deposit Account No. 03-2775, under Order No. 13111-00039-US from which the undersigned is authorized to draw.

Respectfully submitted,

By 

Roberte M. D. Makowski, Ph.D.

Registration No.: 55,421

CONNOLLY BOVE LODGE & HUTZ LLP

1007 North Orange Street, P.O. Box 2207

Wilmington, Delaware 19899

(302) 658-9141

(302) 658-5614 (Fax)

Attorney for Applicants

519101_1